10/519 975

Rec'd PCT/PTO 3 0 DEC 2004

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 8 January 2004 (08.01.2004)

PCT

(10) International Publication Number WO 2004/003585 A1

(51) International Patent Classification⁷: 33/02, 33/07

G01R 35/00,

(21) International Application Number:

PCT/EP2002/007226

(22) International Filing Date:

1 July 2002 (01.07.2002)

(25) Filing Language:

English

(26) Publication Language:

English

- (71) Applicant (for all designated States except US): EU-ROPEAN ORGANISATION FOR NUCLEAR RE-SEARCH - CERN [CH/CH]; CH-1211 Genf 23 (CH).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): BERGSMA, Felix [FR/FR]; 1, résidence des Genevrays, F-01630 Peron (FR).
- (74) Agent: WEBER-BRULS, Dorothée; Boehmert & Boehmert, Hollerallee 32, 28209 Bremen (DE).

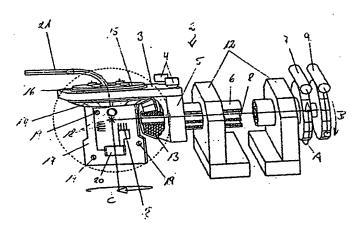
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DEVICE FOR CALIBRATION OF MAGNETIC SENSORS IN THREE DIMENSIONS



(57) Abstract: The invention refers to a magnetic calibration device comprising a mounting means designed to support at least one magnetic sensor card being detachably attached and comprising at least one magnetic sensor, in particular in form of a Hall sensor, to be calibrated and connected to a first analog electronic circuit with at least one current source as well as at least one first analog to digital converter and at least one coil card being detachably attached and comprising three coils arranged substantially orthogonal to each other and connected to a second analog electronic circuit with at least one second analog to digital converter; at least one connection means, in particular in form of a cable or a wireless link, for applying at least one supply voltage to the first and second analog electronic circuits, respectively, and for guiding digital signals from the first and second analog to digital converter, respectively, to at least one processing unit; a magnet for generating a substantially homogeneous and constant calibration magnetic field; and a rotator for rotating said cards in said calibration magnetic field around two substantially orthogonal axes.

2004/003585 A1 |||||||